

## Abstract

A rocking seat control apparatus for a moveable seat supported and having a magnetic member attached thereto is provided that is capable of maintaining the seat being rocked constant in rocking amplitude. The apparatus includes a solenoid for bi-directionally attracting the magnetic member to cause the seat to move in a positive and a negative direction alternately and thereby to be rocked; an amplitude measuring means for measuring an amplitude of the seat being rocked and a rocking motion of the seat; an amplitude damping factor measuring means responsive to displacements in the positive and negative directions of the seat being rocked for measuring an extent of damping factor of the amplitude caused while the seat is being rocked; and a solenoid energizing means for energizing the solenoid means during a time period in which the seat is being rock traveling a distance that is a product of the measured rocking swing and the measured extent of damping factor of amplitude.

A rocking seat control apparatus is also provided that includes a rocking control circuit that computes a  $1/f$ -type fluctuating rocking motion for driving the solenoid so as to rock the seat in a mode of  $1/f$ -type spectrum fluctuation.